

MADEHOUSE

28 PM 2:30

R1-156

July 28, 1997

Kate Hansel  
CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

SUBJECT: CALFED Bay-Delta Program Proposals for Ecosystem Restoration Projects and Programs from the Sonoma County Water Agency in Response to the 1997 Category III Request for Proposals (RFP)

Dear Ms. Hansel:

Enclosed please find ten (10) copies of each of the following five (5) CALFED Bay Delta Program Proposals submitted to you, as required, by 4:00 p.m., on July 28, 1997, by the Sonoma County Water Agency:

1. Napa - Sonoma Marsh Wildlife Area Wetland Restoration
2. City of Petaluma Treatment Plant Upgrade
3. Sonoma Valley County Sanitation District Treatment Plant Upgrade
4. Reclaimed Water Pipeline Connecting City of Petaluma and City of Santa Rosa Subregional Treatment Plants
5. San Antonio Creek Watershed Restoration Feasibility Study

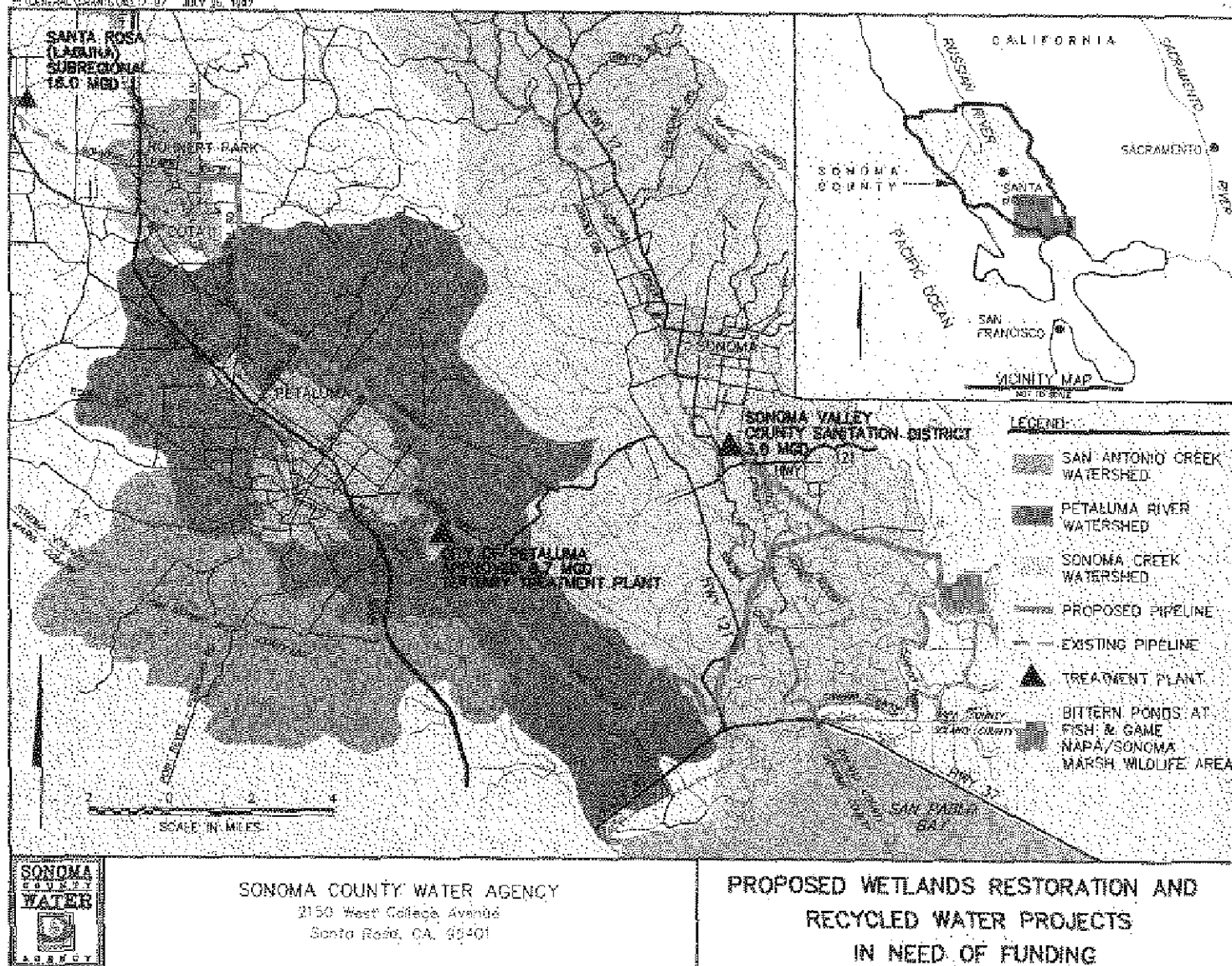
Each of these projects meets the eligibility criteria as presented in the RFP. Please direct all questions and correspondence regarding these grant requests to Carolyn Barbulesco on my staff. She can be reached at (707)521-1807.

We look forward to your prompt review and favorable response to these proposed projects, which are located within the identified geographic priority area of the North San Francisco Bay. Thank you.

Sincerely,

Randy D. Poole  
General Manager/Chief Engineer  
Sonoma County Water Agency

cc: Carolyn Barbulesco



152, 153, 156, 157, 158

COMMITTEES:  
APPROPRIATIONS  
BANKING, HOUSING, AND  
URBAN AFFAIRS  
BUDGET  
ENVIRONMENT  
AND PUBLIC WORKS

## United States Senate

HART SENATE OFFICE BUILDING  
SUITE 112  
WASHINGTON, DC 20510-0505  
(202) 224-3553  
senator@boxer.senate.gov  
http://www.senate.gov/~boxer

July 25, 1997

Kate Hansel  
CALFED Bay-Delta Program  
1416 9th Street, #1155  
Sacramento, CA 95814

Dear Ms. Hansel:

I am writing in support of the Sonoma County Water Agency's application for CALFED Bay-Delta funding.

I understand that the five proposed projects would create significant environmental benefits while improving the quality of life for Sonoma County residents.

These important restoration efforts are designed to provide critical improvements to water quality, protect and restore the ecosystem by helping sustain diverse and valuable plant and animal species, and facilitate wetlands restoration. More specifically, the Sonoma County Water Agency plans to upgrade wastewater treatment centers to meet tertiary-treatment levels, reduce discharges of treated wastewater to San Pablo Bay, provide recycled water to local agriculture, supply an alternative to freshwater use for wetland restoration, and off-set freshwater diversions in the San Antonio Creek Watershed.

CALFED funding is important to the advancement of these worthy projects. I urge you to give Sonoma County Water Agency's application your most serious consideration. If you have any questions, please contact Gia Daniller in my San Francisco office at 415-403-0113.

Thank you for your attention to this matter.

Sincerely,



Barbara Boxer  
United States Senator

BB/gd/jls

1700 MONTGOMERY STREET SUITE 240 SAN FRANCISCO, CA 94111 (415) 403-0100	2250 EAST IMPERIAL HIGHWAY SUITE 545 EL SEGUNDO, CA 90245 (310) 414-5700	850 CAPITOL MALL SUITE 6544 SACRAMENTO, CA 95814 (916) 448-2787	2300 TULARE STREET SUITE 130 FRESNO, CA 93721 (208) 497-5108	326 B STREET SUITE 890 SAN DIEGO, CA 92101 (619) 238-3884	210 NORTH E STREET SUITE 210 SAN BERNARDINO, CA 92401 (909) 888-8826
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PRINTED ON RECYCLED PAPER

# ANTONIO CREEK RESTORATION FEASIBILITY STUDY

SUBMITTED BY:

SONOMA COUNTY WATER

2150 WEST COLLEGE

SANTA ROSA, CALIFORNIA 95401

PHONE: (707) 544-5378

FAX: (707) 544-6123

FAX ID # 94-6000539

TECHNICAL CONTACT

Sean White

Phone: (707) 547-1908

FAX: (707) 524-3782

FINANCIAL CONTACT

Geoff Woodward

Phone: (707) 526-1863

FAX: (707) 544-6123

PROJECT LEADER

CONSTRUCTION

JULY 28, 1997

## **EXECUTIVE SUMMARY**

### **SAN ANTONIO CREEK WATERSHED RESTORATION FEASIBILITY STUDY**

San Antonio Creek flows in an easterly direction and forms the boundary between southern Sonoma and northern Marin Counties. The majority of the watershed is either open space or in agricultural production. Grazing and dairy operations are the primary agricultural activities. San Antonio Creek eventually flows into the Petaluma River near the Petaluma Marsh, one of the largest tidal marshes in the Bay-Delta region.

The City of Petaluma is located in southern Sonoma County approximately 30 miles north of San Francisco and lies within the Petaluma River watershed, which covers an area of 146 square miles. The Petaluma River bisects the city of Petaluma and flows in a southerly direction into western San Pablo Bay. Several of the tributaries to the Petaluma River support anadromous fisheries.

Currently, the Petaluma treatment plant annually discharges approximately 1.1 billion gallons of secondary-treated wastewater into the Petaluma River and the San Pablo Bay/North Bay Marshes complex. The Sonoma County Water Agency (SCWA) is requesting CALFED funds to assess the feasibility of constructing a pipeline from the Petaluma treatment plant to the San Antonio Creek watershed area. The purpose of the proposed pipeline is to provide a source of reclaimed water to dairy operators in the San Antonio Creek watershed to offset freshwater diversions and reduce the amount of reclaimed water discharged into the Petaluma River from the City of Petaluma wastewater treatment plant. The project would provide approximately 2,000 acre feet of secondary- and/or tertiary-treated reclaimed water per year to the dairy operators in this area while implementing Best Management Practices being developed by the San Antonio Watershed Association.

In addition to primary benefits to San Antonio Creek and the Petaluma River, this project would also improve water quality in the San Pablo Bay/North Bay Marshes complex. This area provides habitat for all the fisheries of the Priority Species list which include chinook salmon, delta smelt, splittail, steelhead trout, green sturgeon, and striped bass, and hundreds of thousands of migratory waterfowl, shorebirds, and wading birds.

## **PROJECT DESCRIPTION**

### **A. Project Description and Approach**

The purpose of the proposed project is to assess the feasibility of providing a source of reclaimed water to dairy operators in the San Antonio Creek watershed to offset freshwater diversions and reduce the amount of reclaimed water discharged into the Petaluma River from the City of Petaluma (Petaluma) wastewater treatment plant. The proposed project would consist of constructing pipelines from the Petaluma treatment plant to the San Antonio Creek watershed and would provide approximately 2,000 acre feet (AF) of secondary- and/or tertiary-treated reclaimed water per year to the dairy operators in this area.

In addition to primary benefits to San Antonio Creek and the Petaluma River, implementation of this project would also improve water quality in the San Pablo Bay and adjacent wetland habitats, including the Petaluma, Napa, and Sonoma Marshes. The San Pablo Bay/North Bay Marshes complex provides habitat for all the fisheries of the Priority Species list which include chinook salmon, delta smelt, splittail, steelhead trout, green sturgeon, striped bass, and hundreds of thousands of migratory waterfowl, shorebirds, and wading birds.

### **B. Location and/or Geographic Boundaries of Project**

San Antonio Creek flows in an easterly direction and forms the boundary between southern Sonoma and northern Marin Counties (Figure 1). The majority of the watershed is open space or in agricultural production. Grazing and dairy operations are the primary agricultural activities. San Antonio Creek eventually flows into the Petaluma River near the Petaluma Marsh. The Petaluma Marsh is one of the largest tidal marshes in the Bay-Delta region.

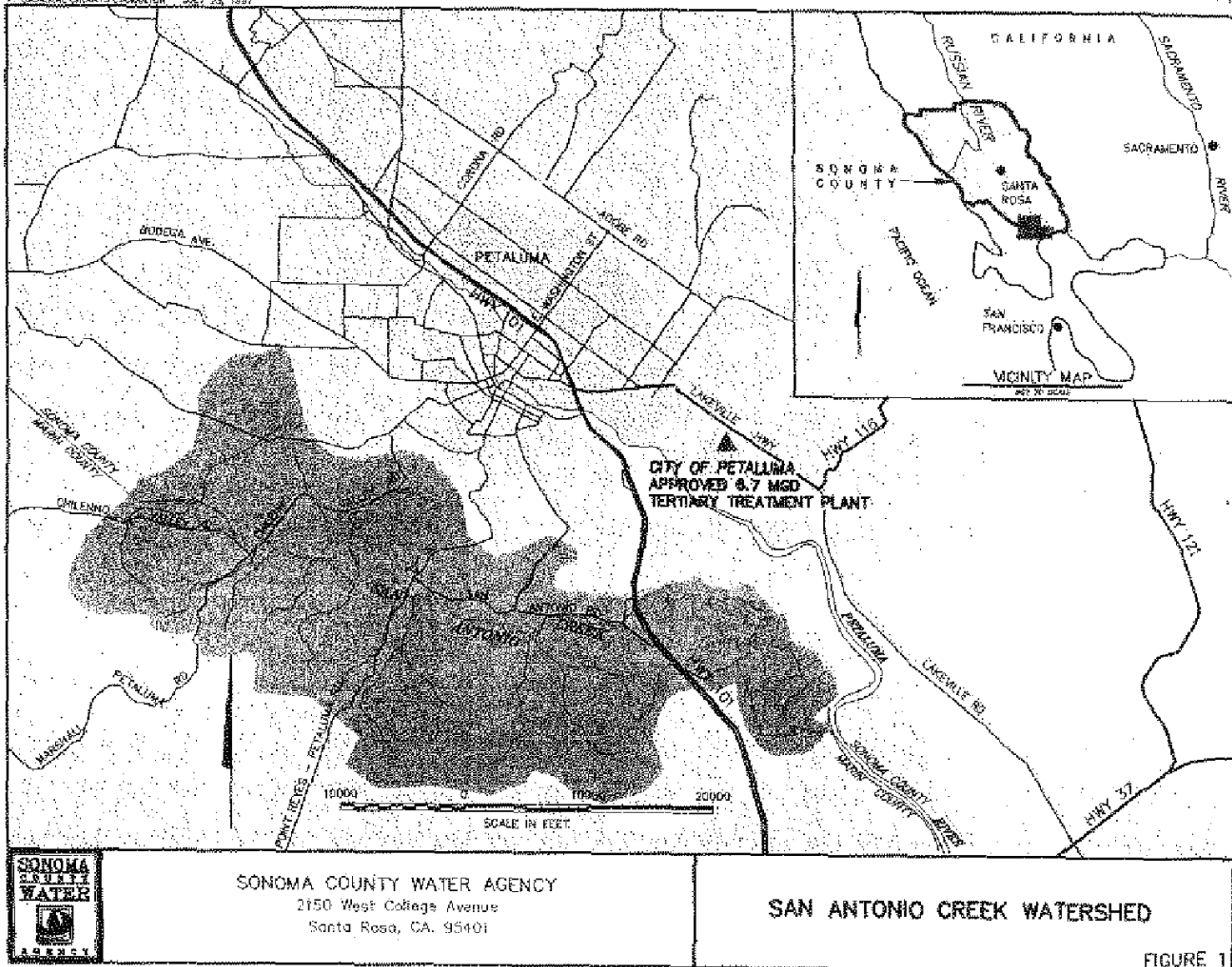
The City of Petaluma is located in southern Sonoma County approximately 30 miles north of San Francisco and lies within the Petaluma River watershed, which covers an area of 146 square miles. The Petaluma River bisects the city of Petaluma and flows in a southerly direction into western San Pablo Bay. Several of the tributaries to the Petaluma River support anadromous fisheries.

### **C. Expected Benefits**

Priority species, habitat and expected benefits are summarized in Table 1. The primary stressor categories (as defined by the ERPP) addressed by the proposed project include (1) Alteration of Flows and Other Effects of Water Management, (2) Channel Form Changes, (3) Water Quality, (4) Water Temperature, and (5) Land Use. Further details on expected benefits are discussed below.

#### **Primary Stressors and Benefits**

The ERPP has identified several subcategories within the North Bay region including hydrograph alterations, entrainment, migration barriers, loss of existing riparian zones or lack of regeneration potential, increased contaminants, water temperature, and land use practices that will be addressed through implementation of the proposed project.



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1-003594

<b>Table 1. Summary of priority species, habitat usage and expected benefits from implementation of the proposed San Antonio Creek Watershed Restoration Feasibility Study.</b>		
<b>Priority Species</b>	<b>Habitat in Project Vicinity</b>	<b>Expected Benefits</b>
Steelhead trout	Steelhead are known to inhabit every major tributary to San Pablo Bay and the North Bay Marshes including San Antonio Creek. Steelhead spawn in the tributaries and use the San Pablo Bay/North Bay Marshes complex during migration and rearing.	San Antonio Creek currently supports a remnant steelhead fishery. Implementation of the proposed project will improve steelhead habitat in the San Antonio Creek watershed by reducing the number of instream diversions and improving riparian habitat through land use modifications (BMP's). The project will also improve water quality in the Petaluma River and the San Pablo Bay/North Bay Marshes complex by reducing surface water discharge from the Petaluma treatment plant.
Winter-run and spring-run chinook salmon	Chinook juveniles have been found in the North Bay Marshes by CH2M Hill in 1996. Although these specimens were determined to be fall-run progeny, their presence indicates that the North Bay Marshes are suitable rearing habitat for chinook juveniles.	The North Bay Marshes and San Pablo Bay provide habitat for all of the fisheries on the Priority Species list. Implementation of the proposed project will improve water quality in the Petaluma River, San Pablo Bay, the North Bay Marshes and their tributaries. Currently, the City of Petaluma Treatment Plant discharges approximately 1.1 billion gallons of secondary-treated water into the San Pablo Bay/North Bay Marshes complex between November 1 and April 30 of each year. The proposed project will reduce this discharge from the treatment plant.
Delta smelt	Delta smelt have been documented in the North Bay Marshes by CDFG (1977) and Wetlands Research Associates (1995). Delta smelt do not breed in the North Bay Marshes, but use the area for juvenile rearing and foraging.	
Splittail	Sacramento splittail have been observed in the North Bay Marshes by CDFG (1977) and CH2M Hill (1996). Splittail use the North Bay Marshes during all life history phases, including spawning, juvenile rearing and foraging.	
Green sturgeon	Green sturgeon have been collected in San Pablo Bay (Moyle 1976).	
Striped bass	Striped bass are an economically important game species throughout the entire San Pablo Bay region.	
Migratory birds	Hundreds of thousands of migratory waterfowl, shorebirds, and wading birds rely on the San Pablo Bay/North Bay Marshes complex. The marsh is used by migratory birds during all phases of life history, including breeding, foraging, roosting, and overwintering.	Expected benefits to migratory birds are the same as described for the fisheries above.

*Hydrograph Alterations:* By making reclaimed water available for agricultural irrigation, farmers will be able to substitute reclaimed water for existing riparian diversions. This substitution process may augment stream flows in tributaries by eliminating numerous small scale diversions.

*Entrainment:* Reducing entrainment in the North Bay was identified by the Technical Team's *Stressors And Example Restoration Action Summary Report* as a project consistent with 1997 Category III funding. By making reclaimed water available for agricultural irrigation and dairy operations, farmers will be able to substitute this source for existing riparian diversions. This substitution process may potentially eliminate many small scale unscreened diversions.



*Migration Barriers:* In addition to unscreened or poorly screened intakes, many riparian diverters use summer dams to retain water during low flow periods. Summer dams can be a significant migrational barrier for juvenile anadromous fish. Substituting reclaimed water for riparian diversions will make summer dam structures obsolete.

*Loss of Existing Riparian Zones or Lack of Regeneration Potential:* The primary land use in the San Antonio Creek watershed is agriculture. Landowners in the watershed have recently formed the San Antonio Creek Watershed Association to improve land use and agricultural practices within the watershed. Providing a substitute for riparian diversions will facilitate projects such as constructing fences to isolate livestock from riparian areas.

*Increased Contaminants:* Currently, the Petaluma treatment plant annually discharges approximately 1.1 billion gallons of secondary-treated wastewater into the San Pablo Bay/North Bay Marshes complex. Implementation of the proposed project will make a portion of this water available for dairy farmers and other agricultural irrigators in the San Antonio Creek watershed, thereby reducing surface water discharges.

*Water Temperature:* Temperature conditions in the San Antonio Creek watershed will be improved through riparian enhancement efforts that will be facilitated through implementation of the proposed project.

*Land Use Practices:* Existing land uses in the watershed are under review by local agricultural landowners who have recently formed the San Antonio Creek Watershed Association. The Association's goals include improving water quality in the watershed through implementation of dairy waste Best Management Practices.

#### Potential Benefits to other Ecosystem Restoration Programs and Third Parties

*Agriculture:* See Table 1 and the above section entitled *Increased Contaminants*.

#### **D. Biological Justification**

Project Need: Currently, the Petaluma treatment plant annually discharges 1.1 billion gallons of secondary-treated wastewater into San Pablo Bay. The proposed project would significantly reduce that discharge and remediate existing land use practices in the San Antonio Creek watershed.

Proposed Approach and Alternatives: The proposed approach is presented in detail in *A. PROJECT DESCRIPTION*. Alternatives to the proposed project include continued discharge of secondary-treated wastewater into the Petaluma River and San Pablo Bay, continuing instream diversions in San Antonio Creek, or potentially upgrading the Petaluma treatment plant to tertiary treatment to improve the water quality of the discharge.

Basis for Expected Benefits: All of the priority species listed in *C. EXPECTED BENEFITS* are known to exist in the vicinity of the proposed project. The proposed project will restore an important tributary to the Petaluma River, and improve water quality in the Petaluma Marsh as well as the entire San Pablo Bay/North Bay Marshes complex.

**Durability of Expected Benefits:** The expected benefits associated with the proposed infrastructure are anticipated to continue as long as the proposed facilities remain operable.

**Project Status:** See *E. PROPOSED SCOPE OF WORK* and *G. IMPLEMENTABILITY*.

#### **E. Proposed Scope of Work**

**Engineering Feasibility Study:** As part of the CEQA process, an engineering feasibility study would be performed to evaluate pipeline alignment alternatives for the project. An engineering feasibility study report would be prepared concurrent with preparation of the CEQA compliance document and would be completed within 18 to 24 months of receiving authorization to proceed.

#### **F. Monitoring and Data Evaluation**

No monitoring is proposed for the Feasibility Study phase of the proposed project.

However, if the proposed project were implemented an extensive monitoring program would be conducted to analyze the effectiveness of this project in improving habitat values in San Antonio Creek and water quality in the Petaluma River and the San Pablo Bay, an.

Habitat monitoring would include tracking the extent and density of riparian canopy and semi-annual macroinvertebrate surveys. Riparian area would be determined annually using aerial photography. Canopy density would be determined annually in the field using a densiometer at selected sites. In addition, the amount and location of livestock exclusion fencing installed each year will be mapped. Macroinvertebrate surveys will be conducted during the spring and fall according to the California Stream Bioassessment Procedure developed by the California Department of Fish and Game (CDFG).

Water quality monitoring would be conducted in San Antonio Creek and near former discharge points into the Petaluma River. Baseline sampling would be conducted in these areas to determine water quality prior to eliminating wastewater discharge and to provide data for future analytical comparison. Monitoring would incorporate all elements typically tested in wastewater prior to discharge, including biological oxygen demand (BOD), total suspended solids, pH, chlorine residuals, copper, zinc, and others. In addition, monitoring would be conducted on drainages present in areas where reclaimed water is or will be used for irrigation and other purposes. Monitoring would involve analyzing water quality and quantity (flow volume) during late spring, summer, and fall months to assess improvements in water quality and flow due to a reduction in agricultural use of creeks and streams. Where possible, baseline sampling would be conducted in these creeks and drainages to determine water quality and quantity prior to project implementation and to provide data for future analytical comparison.

#### **G. Implementability**

The purpose of the Feasibility Study is to assess the implementability of the proposed reclaimed water distribution system to the San Antonio Creek watershed. Preliminary efforts indicate that construction of the proposed distribution pipeline can be performed using conventional pipeline and pumping equipment.

Since July 1996, SCWA has worked with local agricultural and community representatives to evaluate the potential for increasing the use of reclaimed water for habitat restoration and irrigation. Based on these efforts, there is wide ranging support for providing reclaimed water for beneficial use.

*PROJECT DESCRIPTION 5*

# **COSTS AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT**

## **A. Budget Costs**

<b>Task Description</b>	<b>SONOMA COUNTY WATER AGENCY</b>			<b>Total Cost</b>
	<b>Direct Salary and Benefits</b>	<b>Service Contracts</b>	<b>Construction Contracts</b>	
Engineering Feasibility Study	\$30,000	\$0	\$0	\$30,000
<b>Total - SCWA Funding</b>	<b>\$30,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$30,000</b>

<b>Task Description</b>	<b>CALFED GRANT</b>			<b>Total Cost</b>
	<b>Direct Salary and Benefits</b>	<b>Service Contracts</b>	<b>Construction Contracts</b>	
Engineering Feasibility Study	\$0	\$270,000	\$0	\$270,000
<b>Total - CALFED Grant Funding</b>	<b>\$0</b>	<b>\$270,000</b>	<b>\$0</b>	<b>\$270,000</b>

<b>Task Description</b>	<b>PROJECT TOTALS</b>			<b>Total Cost</b>
	<b>Direct Salary and Benefits</b>	<b>Service Contracts</b>	<b>Construction Contracts</b>	
Engineering Feasibility Study	\$30,000	\$270,000	\$0	\$300,000
<b>Total - Project</b>	<b>\$30,000</b>	<b>\$270,000</b>	<b>\$0</b>	<b>\$300,000</b>

## **B. Schedule Milestones**

<b>Task</b>	<b>Estimated Completion (from start of project)</b>
Engineering Feasibility Study	24 months

## **APPLICANT QUALIFICATIONS**

### **Organization of Staff and Other Resources:**

The Sonoma County Water Agency (SCWA) is a special District created by the California State Legislature (Statutes of 1949, Chapter 994 as amended). SCWA is empowered to produce and furnish surface and groundwater for beneficial uses; to control and dispose of flood, storm, and other waters; to generate electrical energy; to provide sanitary sewerage services; and to provide recreational services in connection with flood control and water conservation works. SCWA exercises all of these powers.

New legislation was enacted in 1994, to add wastewater disposal to SCWA's responsibilities. SCWA assumed management responsibilities for County sanitation districts and zones on January 1, 1995, from the former Sonoma County Department of Public Works. Included in the Sonoma County sanitation districts and zones are the Sonoma Valley CSD, Forestville County Sanitation District, Graton Sanitation Zone, Sonoma County Airport Sanitation Zone, Geyserville Sanitation Zone, South Park County Sanitation District, and Occidental County Sanitation District. SCWA's principal sanitation functions are to oversee, operate, and maintain the sanitation zones as determined by the various terms required by the National Pollution Discharge Elimination System (NPDES) permits issued by the North Coast and/or San Francisco Bay Regional Water Quality Control Boards.

SCWA has two principal water supply functions. SCWA owns and operates a water transmission system which delivers water to a number of public and investor-owned water distribution systems in Sonoma and Marin Counties. This transmission system is financed, constructed, and maintained pursuant to an Agreement for Water Supply and Construction of the Russian River-Cotati Intertie Project, dated October 25, 1974, and last amended June 28, 1995. SCWA also regulates the flow of the Russian River for the benefit of agricultural, municipal and instream beneficial uses within Mendocino and Sonoma Counties and municipal uses in Marin County. This function is carried out pursuant to Decision 1610 of the California Water Resources Control Board dated April 17, 1986. This Decision amended the several appropriative water rights permits held by SCWA and established the criteria for the coordinated operation of two federal projects, the Coyote Valley Dam Project on the East Fork Russian River and the Warm Springs Dam Project on Dry Creek. SCWA controls the water supply storage space of the U. S. Army Corps of Engineers Projects under contracts with the United States Government. The water transmission system is operated as an enterprise with revenues derived from water and power sales. The regulation of the Russian River is a governmental function and all costs associated with the USACE projects are paid with the proceeds of countywide levied property taxes, except in the case of Marin and Mendocino County beneficiaries which pay a water charge in lieu of the Sonoma County property tax.

Pursuant to a license from the Federal Energy Regulatory Commission, SCWA constructed and operates a 2.6 megawatt hydroelectric project at Warm Springs Dam. The power is sold to Pacific Gas and Electric Company pursuant to an "as delivered" Public Utilities Commission approved Interim Standard Offer No. 4 power purchase contract. The project was financed by the water transmission system enterprise fund and power sales revenues are pledged to that fund.

SCWA maintains recreational areas at a number of its facilities. The most important of these is Spring Lake Park which was constructed by SCWA and is operated by the County of Sonoma Regional Parks Department under a service contract with SCWA.

The County of Sonoma Board of Supervisors is, ex officio, the Board of Directors of SCWA. The County Administrator, County Clerk, County Assessor, County Tax Collector, County Auditor, County Treasurer, County Counsel, County Purchasing Agency and District Attorney are, unless otherwise provided by the Board of Directors, also ex officio officers of SCWA. SCWA is administered by the General Manager/Chief Engineer, Randy D. Poole, who serves at the pleasure of the Board of Directors.

### **Collaborating Participants**

SCWA is seeking statements of support for this project application from various agencies and organizations with shared environmental interests and concerns. SCWA's solicitation of support letters is taking place concurrently with the preparation of this application. A complete list of the 35 agencies and organizations contacted is provided in Appendix 1. Letters received prior to the application deadline will be attached for your review. Additional letters will be forwarded to CALFED as they are received.

### **Technical, Administrative and Project Management Roles**

Randy D. Poole, General Manager/Chief Engineer of the Sonoma County Water Agency (SCWA) will serve as the Principal Administrator for the project, providing direction and assigning project management and technical functions to SCWA staff. Fiscal review will be supervised by the Administrative Services Officer for SCWA. Grant reporting requirements will be monitored and coordinated by the Grants Procurement Manager.

### **Biosketches**

Randy D. Poole, General Manager/Chief Engineer, Sonoma County Water Agency  
Randy D. Poole holds a Bachelor of Science degree in Agricultural Engineering from Oregon State University (1976) and is a registered Professional Civil Engineer in the States of California and Oregon. He is currently the General Manager/Chief Engineer for the Sonoma County Water Agency. Prior to that, his professional career includes service as Chief Engineer for the Sonoma County Water Agency (1991-94), Chief Engineer/Assistant General Manager for the Marin Municipal Water District (1989-91), and Senior Engineer for the City of Portland, Bureau of Water Works, in Portland, Oregon (1986-89).

Mr. Poole is experienced in CEQA/NEPA and environmental issues, all levels of management for the design, construction, operation, and maintenance of major water, wastewater, and recreational water facilities, including dams, treatment plants, reservoirs, pump stations, storage tanks, groundwater well field systems, larger-diameter pipelines, and other appurtenant facilities. He is also experienced in all phases of water and wastewater supply transmission, storage, pumping, distribution, water rights issues, and groundwater recharge-extraction programs. His professional memberships include the American Water Resources Association, American Water Works Association, and the American Society of Civil Engineers.

Renee T. Webber, Supervising Environmental Specialist, Sonoma County Water Agency

Renee T. Webber holds a Bachelor of Arts degree in Environmental Studies, with a minor in Water Resources, from California State University, Sacramento (1984). She is currently the Supervising Environmental Specialist (Environmental Impact Studies and Reports) for the Sonoma County Water Agency, where she supervises and coordinates the environmental review of public and private construction and development projects, is responsible for the preparation of appropriate environmental reports for such projects, and performs related duties as required.

Ms. Webber has a thorough knowledge of Federal, State, and local laws, regulations, current programs and court decisions pertaining to environmental protection. She is well informed about environmental considerations in the design, location, and construction of public (flood control, highway, water supply, sanitation) and private (residential, commercial, industrial) projects as well as citizen and public interest groups dealing with environmental matters.

Sean K. White, Supervising Environmental Specialist, Sonoma County Water Agency

Sean K. White holds a Bachelor of Science degree in Fisheries Biology from Humboldt State University (1991). He is currently the Supervising Environmental Specialist (Fisheries) for the Sonoma County Water Agency, where he manages the Fisheries Enhancement Program. Prior to that, his professional career includes service as the resident Fisheries Biologist and Wildlife Ecologist for Wetlands Research Associates, Inc., in San Rafael, California, and also a Director on the Marin Municipal Water District Board of Directors.

Mr. White has authored the fisheries component for numerous environmental documents, including *Biological Assessment, Route 37 Improvements White Slough Specific Area Plan Environmental Studies (1995)*, *Cargill Salt Environmental Assessment (1994)*, and *Redwood High School Marsh Enhancement Monitoring (1993)*. In addition, he has engaged in a wide variety of fishery resource surveys and has utilized numerous restoration techniques.

Michael D. Thompson, Civil Engineer, Sonoma County Water Agency

Michael D. Thompson holds a Bachelor of Science degree in Civil Engineering from California Polytechnic State University, San Luis Obispo (1982). In addition, he holds a Master of Science degree in Civil Engineering and a Master of Business Administration degree, both from the University of California, Davis (1987). He is a registered Professional Civil Engineer as well as a Registered Environmental Assessor in the State of California. He is currently a Civil Engineer for the Sonoma County Water Agency. Prior to that, his professional career includes service at two Novato, California, firms -- as Senior and Associate Engineer for PES Environmental, Inc. (1989-96), Project Engineer for Harding Lawson Associates (1987-89) and as Staff Engineer for S. S. Papadopoulos, Davis, California.

Mr. Thompson has provided environmental engineering services to both private and public sector clients. He is familiar with a wide variety of civil and environmental engineering projects. He has prepared structural designs using steel, concrete, and earth building materials, performed groundwater modeling, become familiar with regulations associated with drinking water quality and wastewater discharge, directed earthwork grading projects, supervised and trained technical staff, and managed complex environmental investigation and remediation projects.

## ***COMPLIANCE WITH STANDARD TERMS AND CONDITIONS***

### **Conflicts of Interest**

The Sonoma County Water Agency, as Applicant, will comply with all State and Federal conflict of interest laws, including but not limited to, Government Code Section 1090, and Public Contract Code 10410 and 10411 for State conflict of interest requirements.

### **References for Similar Projects**

Similar projects in which the Sonoma County Water Agency has served as a partner, participant, or lead agency are described in the following project reports:

1. Sonoma Valley County Sanitation Districts Hudeman Slough Discharge Management Plan, 1994
2. Hudeman Slough Mitigation and Enhancement Wetlands, 1996
3. Sonoma County Water Agency Fisheries Enhancement Program
4. Adobe Creek Fishway Construction and Habitat Restoration
5. Russian River Action Plan



## ***APPENDICES***

***LETTERS OF SUPPORT***

**Richard Charter**

6947 Cliff Avenue, Bodega Bay, CA 94923  
(707)875-3482 (707)875-2345 fax (707)875-2947

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July 22, 1997

CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

To Whom It May Concern:

I am writing in support of a grant proposal by the Sonoma County Water Agency for a recycled water distribution pipeline connecting the City of Petaluma and the City of Santa Rosa Subregional Treatment Plants. It is clear that this project could facilitate the restoration of degraded bayfront wetland habitat at the Cargill site and would also provide a very significant contribution to the utilization of treated wastewater for agricultural irrigation and for other constructive purposes.

I have been a direct participant in the restoration of tidal wetlands at the Sonoma Baylands Project and the Petaluma River Tidal Marsh Restoration Project during my former tenure as Executive Director of the Sonoma Land Trust. I appreciate the complexity of habitat restoration projects and the challenges faced by agencies seeking to carry out such projects, particularly when it comes to securing an allocation of fresh water in a water-scarce region.

My support is contingent upon thorough environmental review of the proposed project and the concurrence of all relevant regulatory agencies that the project would enhance the health of San Francisco Bay.

Sincerely,

*Richard Charter*

Richard Charter

# SONOMA COUNTY CONSERVATION ACTION

40 Pacific Avenue, Santa Rosa, CA 95404

Phone: (707) 571-8566 • FAX: (707) 575-8903

Tuesday, July 22, 1997

## Board of Directors

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Sheri Cardo  
Richard Day  
Una Glass  
Kate Sater  
Jerry Waxman

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Anne Seeley  
Leana Sims  
Jim Sullivan  
Len Swenson  
Michael Symons  
Herbert Terrier  
Joan Vilms  
Jim Winston  
Suzanne Whipple  
Jody Young

## Technical Advisors

Paula Blaydes  
Tim Haddad  
Ned Orrett  
Liza Prunuske  
Krista Rector  
Rick Theis

## Executive Director

Mark Green

## Program Director

Joelle Concalves

FPPC ID #911196

Randy Poole  
General Manager  
Sonoma County Water Agency  
2150 West College Ave.  
Santa Rosa, CA 95401

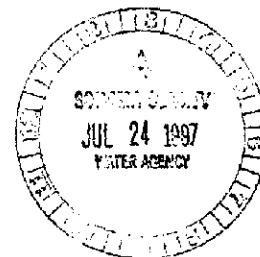
Dear Randy:

I am writing on behalf of Sonoma County Conservation Action, the county's largest conservation organization with more than 7,500 member households in Sonoma County. Conservation Action organizers personally contact 50,000 households per year, which provides us with a clear sense of the local political pulse.

We are writing in reference to the application for Cal/Fed grant funding by the Sonoma County Water Agency for proposed wastewater pipeline projects which would serve to provide irrigation with tertiary-treated wastewater to agriculture in southern Sonoma County and to flush the Cargill salt pond site in southern Napa County with overflow wastewater for purposes of restoring the Cargill site as a functioning bay wetland.

Conservation Action supports the Agency's application for Cal/Fed funding for the southern Sonoma County project, for the following reasons and subject to the caveats listed on the following page:

- Tertiary treated wastewater is a high-quality resource developed at great cost by the communities of our county.
- Local agriculture should benefit from the use of this water rather than demanding more withdrawal of fresh water from the Russian River.
- A vital agricultural economy is the best defense against urban encroachment into the world-class agricultural lands of Sonoma County.
- In light of the historical eradication of 90% of San Francisco Bay's wetlands, the restoration of 10,000 acres of bay wetlands at the Cargill site would constitute a major step forward in enhancing the biological health of the Bay.



Conservation Action's tentative endorsement of this project is subject to the following conditions:

- That the net environmental impacts of the proposed projects be thoroughly studied and that all appropriate regulatory agencies agree that the project would enhance the health of land and waterways in Sonoma County and of San Francisco Bay ecosystems.
- That the Sonoma County Water Agency adopts policies which commit the Agency to principles of stewardship and environmental responsibility in managing its reclaimed water collection and distribution systems.
- That the Agency commit to creating permanent mechanisms, such as advisory committees, through which the local environmental community will have greater access to information about the activities of the Agency and greater input into the decision-making of the Agency.

If these criteria are agreed to by the Sonoma County Water Agency, Sonoma County Conservation Action supports SCWA's application for Cal/ Fed grant funding for the Cargill project.

Please contact my office if there are questions.

Sincerely,



Mark Green  
Executive Director

July 22, 1997

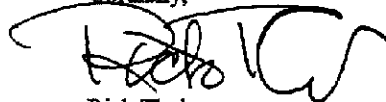
CALFED Bay Delta Program  
1416 Ninth St., Suite 1155  
Sacramento, CA 95814

RE: Sonoma County Water Agency Fund Requests

The Sonoma County Grape Growers Association urges you to support the five major restoration planning efforts by the Sonoma County Water Agency. All projects will have a beneficial effect on the Sonoma County environment. These projects will significantly improve habitat for fisheries, migratory waterfowl, shorebirds and wading birds in the Bay Area. A healthy wildlife habitat is important to achieve a sustainable Bay Area where agriculture can thrive. Also, one of the projects may potentially benefit agriculture in the Lakeville area, which we strongly support.

Thank you for your consideration.

Cordially,

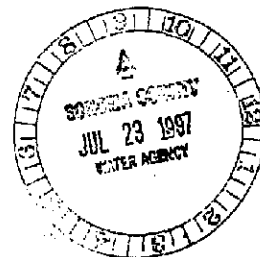


Rick Theis  
Executive Director



SONOMA COUNTY  
grape  
growers  
ASSOCIATION

850 Second Street, Suite C • Santa Rosa, California 95404 • (707) 576-3110





North Bay Chapter, 632 Fifth Street, Santa Rosa, CA 95402

July 22, 1997

CALFED Bay-Delta Program  
1416 Ninth Street Suite 1155  
Sacramento, CA 95814

Dear CAL-FED Bay-Delta Program:

This letter is to confirm Trout Unlimited's support for the Sonoma County Water Agency proposal to reuse reclaimed water from the Santa Rosa Subregional Treatment plant for restoration of Bay Wetlands at the Cargill Salt Ponds.

Trout Unlimited is a cold water fishery conservation organization with 95,000 members internationally and 1,100 members in the North Bay Chapter. Our membership is particularly concerned about the Coho Salmon and Rainbow Steelhead Trout fisheries of the Russian River and opposes any further degradation of the Laguna de Santa Rosa (an Impaired Waterway), Mark West Creek, and the Russian River by resource wasteful waste water discharges to threatened and endangered salmonid habitat.

A program to reuse the Subregional plant's reclaimed water for restoration of Bay Wetlands is the type of proposal we can support that will actually use this valuable water resource for environmental enhancement rather than waste over 8 billion gallons of water annually discharging it to the once thriving salmonid habitat of the Russian River.

We urge CALFED to approve funding for the upgrading of the Sonoma Valley and Petaluma treatment plants to tertiary treatment and restoring 8,000 acres of Cargill salt pond to important wetland and fishery nursery habitat by providing a pipeline from Santa Rosa's Subregional treatment plant to the Petaluma Plant and the Sonoma Valley plant to the Cargill salt ponds. This pipeline will also allow for North Bay agricultural economic development by reuse of the nutrient-rich water along the pipeline's route.

Trout Unlimited would be pleased to be represented on a citizen advisory committee to the Sonoma County Water Agency to help in the implementation of this project and restoration work planned in the North Bay and Russian River watersheds.

Sincerely,  
TROUT UNLIMITED

R. Brian Hines  
Board of Directors  
North Bay Chapter

Sincerely,  
TROUT UNLIMITED

Mike Swaney  
Conservation Chairman  
California State Council

cc: Stan Griffin, Regional VP